# Michigan Department of Transportation's 2008 Research Summit







### Taking the Next Step: Today's Breakout Groups

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# Research and Implementation

 These efforts of the Research Executive Committee, along with today's follow-up work, support MDOT's goals for research and implementation.

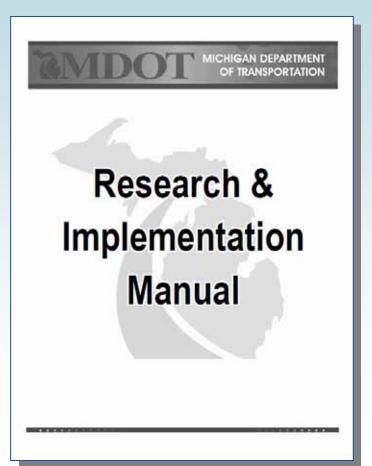




- ORBP developed this manual with the input of
  - MDOT project managers
  - MDOT executives
  - ORBP staff
  - Universities
  - Other transportation stakeholders
- Effective October 1, 2008
- Available from ORBP; will be online soon











- Manual puts a renewed focus on:
  - Accountability of all participants in the research process
  - Timely delivery of results
  - Communication of results
  - Research that meets the department's needs
  - Applied research with potential for implementation





- Manual puts a renewed focus on:
  - Accountability of all participants in the research process

    Key ideas for
  - Timely delivery of results
  - Communication of results
  - Research that meets the department's needs
  - Applied research with potential for implementation





today's meeting

# **Building from the REC meeting**

- ORBP considered the agency's most important issues identified by the REC.
- ORBP divided these into five Strategic Themes
  - Safety
  - Mobility
  - Organizational Effectiveness
  - Environmental Accountability
  - Renewal and Sustainability





# **Strategic Themes**

## For example, Safety

Issue	Bureau
How effective is MDOT's investment in safety programming and crash reduction? Conduct before-and-after studies, looking at all previous studies.	Larry Tibbits COO
What is the behavioral component of crashes, and how can education money be directed to minimize these crashes? What will be most cost effective?	Leon Hank CAO
How can MDOT improve safety techniques, materials and equipment? The department should look into current practices and ways to improve.	Randel Van Portfliet Superior Region
How can the federal-state partnership for state safety system oversight of rail transit be improved?	Sharon Edgar Passenger Transportation
How do Intelligent Transportation Systems and Vehicle Infrastructure Integration (VII) tie together? Can cars be designed that "can't crash"? (Identified as a long-term need.)	John Friend Highway Delivery





## **Breakout Groups**

- This afternoon's breakout groups will center around these strategic themes.
  - Participants have been assigned to a group based on their stated interest.





# What MDOT Expects from You

- Please be
  - Open minded
  - Creative
  - A good talker and a good listener





# **Breakout Groups**

- Each breakout group will look at the issues the REC identified for this theme.
- For each issue, the group will
  - Brainstorm how research can help solve or address the issue
  - Define how the research can be implemented
- These "research concepts" will be the kernels of research project statements.





# 1) What is the most cost effective way to resolve recent problems with the quality of stormwater run off from our roads and bridges?

#### Issues to address/project ideas to develop

How effective is MDOT's investment in safety programming and crash reduction? Conduct before-and-after studies, looking at all previous studies.

What is the behavioral component of crashes, and how can education money be directed to minimize these crashes? What will be most cost effective?

How can MDOT improve safety techniques, materials and equipment? The department should look into current practices and ways to improve.

How can the federal-state partnership for state safety system oversight of rail transit be improved?

How do Intelligent Transportation Systems and Vehicle Infrastructure Integration (VII) tie together? Can cars be designed that "can't crash?" (Identified as a long-term need.)





# 1) What is the most cost effective way to resolve recent problems with the quality of stormwater run off from our roads and bridges?

Specific problem to address, question to answer or information needed		
Research approach (data analysis, field or lab testing, surveys, before and after studies, etc.)		
Expected implementation of results and benefits for MDOT		





# 1) What is the most cost effective way to resolve recent problems with the quality of stormwater run off from our roads and bridges?

#### Specific problem to address, question to answer or information needed

State DOTs are mandated by Federal laws to improve the quality of water draining from state transportation systems. A number of devices are available for capturing and filtering storm water runoff, but it is not clear which devices perform the best or are most cost effective.

Research approach (data analysis, field or lab testing, surveys, before and after studies, etc.)

Identify a sampling of recommended stormwater filtration devices and install them in selected locations in Michigan.

Monitor the effectiveness of the storm water pollutant removal by gathering water samples, testing them in a laboratory, and providing sample analysis.

**Expected implementation of results and benefits for MDOT** 

The results will help MDOT select the most effective storm water devices to install based both on environmental impacts and cost/benefit ratio.





# **Report Out**

- After the breakout groups, the conference will reconvene.
- A representative from each group will highlight two research concepts from its discussion.
- ORBP will compile all of the research concepts for distribution to all research stakeholders.





### What MDOT Wants to Achieve

- These research concepts will become the basis for fully-formed research projects.
- This will ensure that the research program helps MDOT meet its responsibilities and fulfill its goals.





# What You Can Expect from MDOT

- We will
  - Listen to every idea
  - Make sure everyone has a say
  - Respect and appreciate the talent and expertise that everyone has to offer





# **Breakout Group Room Assignments**

Group	Strategic Theme	Room
1	Safety	Room 101
2	Renewal & Sustainability	Room 102
3	Renewal & Sustainability	Room 103
4	Organizational Effectiveness	Room 104
5	Organizational Effectiveness	Banquet Room 5
6	Mobility	Banquet Room 6
7	Mobility	Banquet Room 7
8	Environmental Accountability	Banquet Room 8





### **Questions?**

- Please go directly to your breakout group promptly at 12:30 p.m.
- The group facilitator will have further instructions.
- What other questions can we answer now?





# Housekeeping Items

- During the breakout sessions, place any items you wish to keep in this room (including papers) on your chair. The tables will be cleaned.
- Group 6 and Group 8 should exit at the other end of this room to find Banquet Room 6 and Banquet Room 8.

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